

Maui Information

Useful Information

Table of Metric Equivalents:

1 (statute) mile = 1609.344 meters

1 (statute) mile = 0.86898 nautical miles

1 nautical mile = 1852 meters exactly, by definition.

1 micrometer (same as micron) = 0.000001 meters = 0.001 millimeters

1 radian = 57.2958⁰ of arc

1 milliradian = 0.0572958 degrees = 3.43775 arc minutes = 206.265 arc seconds.

1 arc second = 0.004848 milliradians = 4.848 microradians or roughly 5 microradians.

Local Maui Time:

MSSS time is based on a standard time clock system to synchronize telescope motions with the given orbital parameters. MSSS uses UTC (Universal Coordinated Time), which is the time at the zero meridian (Greenwich UK), but as determined by the U. S. Naval Observatory. The state of Hawaii does not use Daylight time, therefore the conversion is the same the year-round. The timing equipment used to regulate and synchronize operations is described in Section 5 on support systems.

Subtract 10 hours from the "hours" part of the UTC, GMT, or Zulu time to find the local time which is HST or Hawaiian Standard Time and the time zone is (W) or "whiskey."

Facts about the Observatory:

The floor areas, electric power availability, and air conditioning capability at the location of the site are listed below:

Square footage:

45,000	AEOS Facility
15,500	AMOS/MOTIF Main building
7,100	AMOS/MOTIF Domes, upper and lower floors
10,700	GEODSS Total, including domes
5,100	Technical Support Building
240	Hazardous Material Storage Buildings

Power Availability:

60 HZ Electrical Power:

1,000 KVA

440 VAC, 3-phase

208 VAC, 3-phase

120 VAC, 1-phase

15 KVA U. P. S.

208/120 VAC, 1-phase

500 KVA Emergency Generator (full site capability)

440 VAC, 3-phase (line-frequency dependent timing devices may drift due to small errors in frequency control).

400 HZ Electrical Power:

Dedicated Motor Generator, 115 VAC, 1-phase, 8.7 A.

Cooling Systems:

Air Conditioning:

127 Tons (approx. 80% Utilized)

160 Tons Air-cooled Condensing Capacity.

Two Major Separate Glycol Cooling Circuits are also available.

Location Coordinates:

The observatory (referenced to the point on the azimuth axis at the height of the intersection of the polar and declination axes of the 1.2-meter telescope mount) is located at a geodetic altitude of 3058.2 meters (10034 feet) close to the crest of the dormant volcano Haleakala at:

Latitude 20:42:30.5 (20.7084)⁰ N

Longitude 156:15:28.7 (156.2578)⁰ W